

### **REMARKS**

Claims 1-7, 9-17, 19-27, 29, and 30 are pending in the present application. Claims 8, 18, and 28 were canceled. Claims 1, 4-7, 9-11, 14-17, 19, 21, 24-27, 29, and 30 were amended. Reconsideration of the claims is respectfully requested.

Amendments made to the claims are intended to more clearly distinguish the claims over the cited prior art.

#### **I. 35 U.S.C. § 101, Statutory Subject Matter**

The Examiner has rejected claims 21-27, 29, and 30 for being directed to non-statutory subject matter. Claim 21 has been amended to include the limitation of "recordable-type media." Accordingly, claim 21, and dependent claims 22-27, 29, and 30 also have this limitation. Consequently, each claim is now reciting statutory subject matter.

#### **II. 35 U.S.C. § 101, Double Patenting**

The Examiner has provisionally rejected claims 1-7, 9-17, 19-27, 29, and 30 under obviousness-type double patenting. On December 20, 2005, a terminal disclaimer was filed in that case, limiting the statutory term applicable in 10/042,496 to the term set by the granted claims in the present case, 10/042,505.

#### **III. 35 U.S.C. § 103, Obviousness**

The Examiner has rejected claims 1-7, 9-17, 19-27, 29, and 30 under 35 U.S.C. § 103(a) as being unpatentable over Baugh et al. (U.S. Patent No. 5,815,553) in view of Herlin et al. (U.S. Patent No. 5,915,021), and further in view of Asbby et al. (U.S. Patent No. 5,305,384). This rejection is respectfully traversed.

To establish *prima facie* obviousness of a claimed invention, all of the claim limitations must be taught or suggested by the prior art. MPEP 2143.03. See also, *In re Royka*, 490 F.2d 580 (C.C.P.A. 1974).

With regard to claims 1, 11, and 21, the Examiner states:

Regarding claims 1, 11 and 21, Baugh et al. discloses a method/system/computer program product for securing radio transmissions utilizing a conventional radio, said method comprising the steps of:

- Providing a conventional radio, said conventional radio being incapable of encrypting or decrypting signals, said radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port that is configured to be coupled to a conventional speaker, said radio remaining unmodified (abstract, col. 2, lines 58-62 and fig. 1, ref. num 50, 58, and 62);

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- Receiving, within said computer system, an input analog signal from said microphone (col. 2, lines 58-62);
- Encrypting, within said computer system, said input analog signal utilizing public key encryption (col. 8, lines 44-47); and
- Passing said encrypted input signal from said computer system to said microphone port that is included within said unmodified radio and transmitting said encrypted input analog utilizing said unmodified radio, wherein radio transmissions from said radio are secured (col. 3, lines 9-14 and fig. 1, ref. num 70 and 74).

Baugh et al. does not specifically teach the input signal is encrypted using public key techniques.

Herlin et al. teaches a method for sending a secure message in a telecommunications system using public key encryption (col. 5, lines 12-35 and col. 9, lines 56-58).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine using a public key encryption system, as taught by Herlin et al., with the methods/system/computer program product of Baugh et al. It would have been obvious for such modifications because the system gains the advantage of securing the recorded message from unauthorized disclosure by an eavesdropper who is monitoring the communication link. By using public key encryption, the recorded message can only be decrypted by the private key that corresponds to the public key used to encrypt the message (see col. 3, lines 60-67 of Herlin et al.).

The combination of Baugh et al. as modified by Herlin et al. does not specifically teach providing a computer system being separate and apart from said radio.

Ashby et al. teaches providing a computer system coupled between a microphone and said radio, wherein inputs into said radio are received first by said computer system, said computer system being separate and apart from said radio (fig. 1, ref. num 12, separate from the other components).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to combine connecting a radio output to a computer input, as taught by Ashby et al., with the methods/system/computer program product of Baugh et al./Herlin et al. It would have been obvious for such modifications because encrypting communications from a radio, who is directly connected to a computing device, prevents eavesdropping on police and military communications by encrypting the data directly from the radio (see abstract and col. 1, lines 18-23 of Ashby et al.).

Office Action dated November 22, 2005, pages 4-7.

Claim 1, which is representative of claims 11, and 21 is recited as follows:

A method for securing radio transmissions utilizing a conventional radio, said method comprising the steps of:

providing a conventional radio, said conventional radio being incapable of encrypting or decrypting signals, said radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port that is configured to be coupled to a conventional speaker, said radio remaining unmodified;

providing a computer system coupled between a microphone and said radio, wherein inputs into said radio are received first by said computer system, said computer system being separate and apart from said radio;

receiving, within said computer system, an input analog signal from said microphone;  
encrypting, within said computer system, said input analog signal utilizing public key encryption to form an encrypted file;  
passing said encrypted file from said computer system to said microphone port that is included within said unmodified radio; and  
transmitting said encrypted file utilizing said unmodified radio, wherein radio transmissions from said radio are secured.

The Examiner alleges *Baugh* to show the claim 1 recited, "radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port." The following passage is what the Examiner suggests shows this feature:

The user on the first computer 50 utters spoken utterances 58 into a recorder 62. For the preferred embodiment, the recorder 62 includes a microphone and a Sound Blaster card with its associated software drivers located within the first computer 50.

*Baugh*, Column 2 lines 58-62.

*Baugh* does not teach the claim 1 recited, "radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port." *Baugh* merely teaches a recorder, which includes a microphone and a Sound Blaster Card. In contrast, claim 1 recites a radio. A recorder is not a radio. A microphone is not a radio. A Sound Blaster Card is not the claim 1 recited radio. The Examiner has failed show a reference that teach every element of claim 1.

*Baugh* also shows:

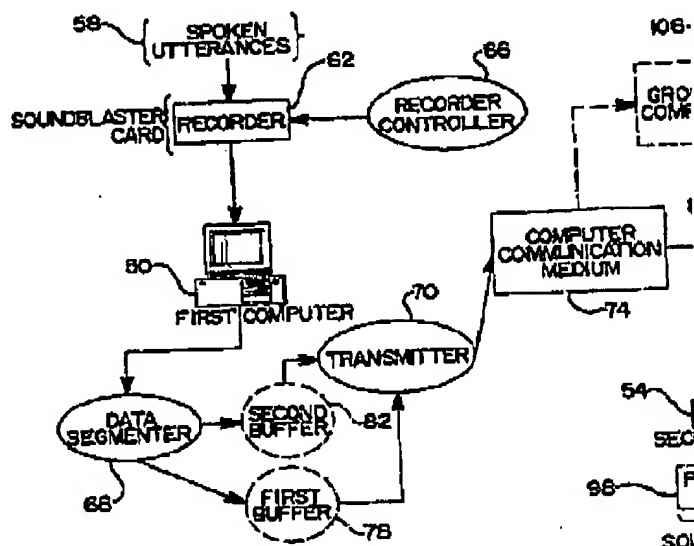
The user uses a recorder controller 66 to control the recorder 62. The functions of the recorder controller 66 include starting the recorder 62 and stopping the recorder 62. A data segmenter 68 segments the spoken utterances 58 as they are being recorded into data segments. The preferred embodiment segments the spoken utterances 58 into data segments of one-half second duration. As an utterance fills up a data segment, the data segment is sent to the second computer 54.

Specifically, the data segmenter 68 segments the spoken utterances 58 and stores the resultant data segment in a first buffer 78. If the spoken utterances 58 fills up the first buffer, the data segmenter 68 begins storing the next data segment in a second buffer 82. After the first buffer 78 has been filled up, transmitter 70 places the data segment which was stored within the first buffer 78 onto a computer communication medium 74 (such as a phone line optical line, ISDN line or wireless microwave/RF) with the ultimate destination being specified. After the data segment which had stored in the first buffer 78 has been transmitted by the transmitter 70, then the first buffer 78 is available to store another data segment from the data segmenter 68. Likewise, after the data segment which had stored in the second buffer 82 has been transmitted by the transmitter 70, then the second buffer 82 is available to store another data segment from the data segmenter 68. In this way, the data segmenter 68 "ping-pongs" the storage of data segments between the first buffer 78 and the second buffer 82. This approach allows the transmission of portions of the spoken utterances 58 before a user may actually have finished recording his message.

*Baugh*, Column 2 line 63 through column 3 line 25.

*Baugh* does not teach the claim 1 recited, "radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port." *Baugh* merely teaches a transmitter that places a data segment onto a computer communication medium, such as a wireless microwave. The *Baugh* transmitter does not include the recited claim 1 "conventional microphone port" nor does it include "conventional speaker port."

*Baugh*, Figure 1, shows that the transmitter takes inputs from a first buffer 82 and a second buffer 78. Neither first buffer 82 nor second buffer 78 is the recited claim 1 "conventional microphone port." Figure 1 shows transmitter 70 providing output to computer communication medium 74. Computer communication medium 74 is merely the air, and more specifically, an antenna interfacing to the air. In contrast, claim 1 recites, "radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port." The *Baugh* disclosed air is not the recited "conventional speaker port."



Because the Examiner has not shown all of the claim limitations in the references cited, the Examiner has not made a *prima facie* case of obviousness. Consequently, it is respectfully requested that the Examiner allow claim 1, as well as claims 11 and 21, which claim similar subject matter.

Furthermore, *Baugh* does not teach, suggest, or give any incentive to make the needed changes to reach the presently claimed invention. *Baugh* actually teaches away from the presently claimed invention because it teaches a microphone attached to a Sound Blaster as opposed to a radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a

conventional speaker port as in the presently claimed invention. Absent the Examiner pointing out some teaching or incentive to implement *Baugh* and a radio including a conventional microphone port that is configured to be coupled to a conventional microphone and a conventional speaker port, one of ordinary skill in the art would not be led to modify *Baugh* to reach the present invention when the reference is examined as a whole. Absent some teaching, suggestion, or incentive to modify *Baugh* in this manner, the presently claimed invention can be reached only through an improper use of hindsight using the Applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

For the reasons stated, it is respectfully requested that the Examiner allow claims 1, 11 and 21.

Claims 2-7, 9, and 10 depend from claim 1, and for the same reasons, are also in a condition for allowance. These claims include additional patentable features. For example, claim 2 recites encrypting, within said computer system, said input analog signal utilizing a key pair. Claim 6 teaches the feature of decrypting, within said second computer system, said encrypted output utilizing public key encryption to form a decrypted output.

Claims 12-17, 19, and 20 depend from claim 11, and for the same reasons, are also in a condition for allowance. These claims include additional patentable features. For example, claim 14 recites said first application for encrypting said input analog signal utilizing public key encryption to form said encrypted voice file. Examiner cites *Herlin* and *Ashby* for features other than those limitations added by claim 14. Moreover the references cited also do not teach those limitations found in the other dependent claims.

Claims 22-27, 29, and 30 depend from claim 21, and for the same reasons, are also in a condition for allowance. These claims include additional patentable features. For example, claim 27 recites instruction means for decrypting, by said second application, said encrypted output utilizing public key encryption. Examiner cites *Herlin* and *Ashby* for features other than those limitations added by claim 24. Moreover the references cited also do not teach those limitations found in the other dependent claims.

Claim 5, which is representative of claims 15, and 25 is recited as follows:

The method according to claim 1, further comprising:  
receiving, by said computer system from said microphone, said input analog signal;  
wherein the receiving step comprises:  
converting, by a microphone driver that is executing within said computer system, said input analog signal to a file, said file being in a standard voice file format;  
constantly monitoring inputs received from said microphone;  
detecting, by a first application, a receipt of said file;  
wherein the encryption step comprises in response to a detection by said first application of said receipt of said file, encrypting to form the encrypted file utilizing a public key that is part of a public key/private key pair assigned to said computer system.

wherein the encryption step comprises in response to a detection by said first application of said receipt of said file, encrypting to form the encrypted file utilizing a public key that is part of a public key/private key pair assigned to said computer system.

The Examiner alleges that *Baugh* shows the claim 5 recited, "converting, by a microphone driver that is executing within said computer system, said input analog signal to a file, said file being in a standard voice file format." The following passage is what the Examiner suggests shows this feature:

The user uses a recorder controller 66 to control the recorder 62. The functions of the recorder controller 66 include starting the recorder 62 and stopping the recorder 62. A data segmenter 68 segments the spoken utterances 58 as they are being recorded into data segments. The preferred embodiment segments the spoken utterances 58 into data segments of one-half second duration. As an utterance fills up a data segment, the data segment is sent to the second computer 54.

Specifically, the data segmenter 68 segments the spoken utterances 58 and stores the resultant data segment in a first buffer 78. If the spoken utterances 58 fills up the first buffer, the data segmenter 68 begins storing the next data segment in a second buffer 82. After the first buffer 78 has been filled up, transmitter 70 places the data segment which was stored within the first buffer 78 onto a computer communication medium 74 (such as a phone line optical line, ISDN line or wireless microwave/RF) with the ultimate destination being specified. After the data segment which had stored in the first buffer 78 has been transmitted by the transmitter 70, then the first buffer 78 is available to store another data segment from the data segmenter 68. Likewise, after the data segment which had stored in the second buffer 82 has been transmitted by the transmitter 70, then the second buffer 82 is available to store another data segment from the data segmenter 68. In this way, the data segmenter 68 "ping-pongs" the storage of data segments between the first buffer 78 and the second buffer 82. This approach allows the transmission of portions of the spoken utterances 58 before a user may actually have finished recording his message.

*Baugh*, column 2 line 63 through column 3 line 25.

*Baugh* actually teaches a data segmenter that segments the spoken utterances into data segments of one-half second duration. The data segmenter also stores the data segments into at least two buffers. In contrast, the claim 5 recites, "converting." The *Baugh* "storing" is quite distinct from the claimed "converting." Even when *Baugh* describes the data segmenter action as "ping-pongs", *Baugh* still does not describe the claimed, "converting." For the reason *Baugh* lacks the recited feature of "converting", it is respectfully submitted that the Examiner has failed to show each and every element of claim 5.

The Examiner alleges that *Baugh* shows the claim 5 recited, "In response to a detection by said first application of said receipt of said file, encrypting." The following passages are what the Examiner suggests shows this feature:

After the first buffer 78 has been filled up, transmitter 70 places the data segment which was stored within the first buffer 78 onto a computer communication medium 74 (such as a phone line optical line, ISDN line or wireless microwave/RF) with the ultimate destination being specified.

*Baugh* column 3 lines 9-14.

The present invention also includes data encryption. For use of data encryption within the present invention, the data is encrypted before writing to the remote voice file and decrypted when the file is read prior to playback.

*Baugh* column 8 lines 44-47.

In the first instance, *Baugh* actually shows a user making spoken utterances. A user making a spoken utterance is not the claim 5 recited, "in response to a detection by said first application of said receipt of said file, encrypting." In the second instance, *Baugh* actually shows a buffer filling and then a transmitter placing a data segment onto the air. A buffer filling and then a transmitter placing a data segment onto the air is not the claim 5 recited, "In response to a detection by said first application of said receipt of said file, encrypting." In the third instance, *Baugh* actually shows encrypting before writing and decrypting when reading. Again, encrypting before writing and decrypting when reading is not the claim 5 recited, "in response to a detection by said first application of said receipt of said file, encrypting." Although *Baugh* may be doing some encrypting, *Baugh* does not teach encrypting in the manner of claim 5. *Baugh* simply does not teach, "detection by said first application of said receipt of said file." Moreover, even if *Baugh* did teach, "detection by said first application of said receipt of said file," *Baugh* does not teach the file as being the recited, "In a standard voice file format." For the reason *Baugh* lacks the recited feature of "In a standard voice file format", it is respectfully submitted that the Examiner has failed to show each and every element of claim 5.

The Examiner also uses *Herlin* to allege teaching of this feature. The following passage is what the Examiner suggests shows this feature:

System 100 is as described for FIG. 1. Bank 1 and Bank2 each include telecommunications equipment capable of encrypting and decrypting messages received over phone lines 302 and 304, similarly to control unit 106 and logic unit 112 of mobile station M1.

*Herlin* column 9 lines 56-58.

*Herlin* actually teaches encrypting messages as would support a transfer of electronic cash. This is entirely contrary to the recited claim 5, which in the first place deals "in a standard voice file format," and in a second place operates, "in response to a detection by said first application of said receipt of said file, encrypting." These features are simply not present in the cited portion, or any other portion of *Herlin*.

Thus, neither *Baugh* nor *Herlin* support the Examiner's contention that the references teach the claim 5 recited, "in response to a detection by said first application of said receipt of said file, encrypting." Consequently, the Examiner has not made a *prima facie* case of obviousness.

Furthermore, *Herlin* does not teach, suggest, or give any incentive to make the needed changes to reach the presently claimed invention. *Herlin* actually teaches away from the presently claimed invention because it teaches a encrypting messages as opposed to encrypting a file, the file being in a voice file format as in the presently claimed invention. Absent the Examiner pointing out some teaching or incentive to implement *Herlin* and encrypting a file, the file being in a voice file format, one of ordinary skill in the art would not be led to modify *Herlin* to reach the present invention when the reference is examined as a whole. Absent some teaching, suggestion, or incentive to modify *Herlin* in this manner, the presently claimed invention can be reached only through an improper use of hindsight using the Applicants' disclosure as a template to make the necessary changes to reach the claimed invention.

Accordingly, for the reasons stated above, it is respectfully urged that Examiner allow claim 5, as well as claims 15, and 25, which claim similar subject matter.

It is urged that for the reasons stated above, that claims 5, 15, and 25 be allowed.

Therefore, the rejection of claims 1-7, 9-17, 19-27, 29, and 30 under 35 U.S.C. § 103(a) has been overcome.

**IV. Conclusion**

It is respectfully urged that the subject application is patentable over *Baugh*, in view of *Herltn*, and further in view of *Ashby*, and is now in condition for allowance.

The Examiner is invited to call the undersigned at the below-listed telephone number if in the opinion of the Examiner such a telephone conference would expedite or aid the prosecution and examination of this application.

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Respectfully submitted,



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